

British Science Week 2023

Exploring Curiosity, Investigation & Scientific Thinking

British Science Week is a nationwide celebration of science, technology, engineering and mathematics, designed to nurture curiosity and inspire the next generation of scientists, engineers and thinkers. As a country at the forefront of scientific innovation, the UK depends on young people who are confident in asking questions, testing ideas and applying scientific understanding to real-world problems. Our aim throughout the week was to cultivate these habits of mind - encouraging every child to see themselves as a scientist.

Across the school, pupils took part in a vibrant programme of investigations, hands-on experiments and collaborative challenges. Each activity was carefully designed to build enquiry skills aligned with the National Curriculum: predicting, observing, testing, measuring, analysing and concluding. Most importantly, the week fostered joy, curiosity and resilience - the foundations of confident scientific learning.

Class-by-Class Exploration and Enquiry

Squirrel Class – Sound, Forces and Fair Testing

Squirrel Class launched the week with a wonderful exploration of sound. Pupils created their own string telephones and experimented with how sound travels along different materials. They made predictions, tested them, and discovered that sound can travel clearly over surprising distances - even more than two metres - when the string remains tight.

Later in the week, the class took part in an egg-rolling investigation, exploring which materials allowed an egg to travel furthest and fastest down a ramp. Through comparing shiny paper, fabric, card and rough materials, pupils concluded that wrapping paper reduced friction most effectively, allowing the egg to roll with greater speed. The children showed a strong understanding of how to make a fair test, demonstrating brilliant scientific reasoning for their age.

Fox Class – Sound, Structure and Engineering Challenges

Fox Class extended their understanding of physics by investigating which materials carry sound most effectively. Through systematic testing, they compared string, elastic, ribbon and other household materials and were able to make thoughtful conclusions about vibration and sound waves.

Their next challenge involved engineering and structural design: building the strongest possible bridge using just five pieces of paper. Pupils explored folds, layers, arches and triangular structures, and some designs were strong enough to hold over 300 grams. This activity highlighted persistence, critical thinking and the application of real engineering principles at an age-appropriate level.

Owl Class – Light, Colour, Hypothesis Testing and Structural Engineering

Owl Class approached the week with impressive scientific maturity. They began by experimenting with light and refraction, using mirrors and glasses of water to create their own rainbows. This led to thoughtful discussions about how prisms work, why light separates into colours, and whether rainbows can form in the vacuum of space - leading pupils to propose and test hypotheses through research and reasoning.

Their bridge-building challenge mirrored Fox Class's investigation but with the added expectation of modifying and improving designs for maximum strength and duration. The competition quickly grew lively, with pupils analysing one another's structures, adapting techniques and applying mathematical thinking to improve load distribution. Their level of critical thinking was exceptional.

In addition, Owl and Fox Classes braved the cold weather to take part in the Surfers Against Sewage Trash Mob, collecting and categorising local litter as part of a real-world data-gathering project. Pupils discussed how scientific skills can drive environmental change, linking biology, ecology and citizenship.

Impact of the Week

British Science Week 2023:

- Strengthened enquiry skills across all year groups, including predicting, testing, observing, measuring and evaluating
- Enabled pupils to apply scientific knowledge to real-world contexts
- Encouraged teamwork, perseverance and reflective thinking
- Built confidence in communicating ideas and explaining conclusions
- Promoted environmental responsibility and the idea that science can drive positive change
- Created genuine excitement, curiosity and joy across the school

Our pupils showed remarkable creativity, enthusiasm and scientific independence throughout the week. Their questions, discoveries and “wow” moments captured the true spirit of British Science Week - proving that science is not just a school subject, but a way of understanding the world.



GRATITUDE

RESILIENCE

OUTREACH

WONDER

TRUST

HARMONY